

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	142	hydrogen and membrane and palladium and silver and electroless and sputter\$ and steel and support and porous	US-PGPUB; USPAT	ADJ	ON	2008/01/22 13:34
L2	4	hydrogen and membrane and palladium and silver and electroless and sputter\$ and steel and support and porous and polish	US-PGPUB; USPAT	ADJ	ON	2008/01/22 13:34
S1	1	("6152987").PN.	US-PGPUB; USPAT	OR	OFF	2008/01/22 13:31
S2	0	jp-2002119834-\$.did. or jp-2002153740-\$.did. or jp-3288534-\$.did. or tw-400307-\$.did.	US-PGPUB; USPAT	ADJ	ON	2007/06/20 15:27
S3	6	jp-2002119834-\$.did. or jp-2002153740-\$.did. or jp-3288534-\$.did. or tw-400307-\$.did.	EPO; JPO; DERWENT	ADJ	ON	2007/06/20 16:16
S4	3	dc and sputter and (target with (palladium or pd))	EPO; JPO; DERWENT	ADJ	ON	2007/06/20 16:17
S5	168	dc and sputter and (target with (palladium or pd))	US-PGPUB; USPAT	ADJ	ON	2007/06/20 16:18
S6	49	dc and sputter and (target with (palladium or pd)) and (etch or acid)	US-PGPUB; USPAT	ADJ	ON	2007/06/20 16:18
S7	8	dc and sputter and (target with (palladium or pd)) and (etch or acid) and electroless	US-PGPUB; USPAT	ADJ	ON	2007/06/20 16:18
S8	136	hydrogen and extraction and membrane and palladium and sputter	US-PGPUB; USPAT	ADJ	ON	2007/06/21 11:16
S9	114	hydrogen and extraction and (purify or purification) and palladium and sputter	US-PGPUB; USPAT	ADJ	ON	2007/06/21 11:18
S10	191	hydrogen and (extraction or separation) and (purify or purification) and palladium and sputter	US-PGPUB; USPAT	ADJ	ON	2007/06/21 11:19
S11	20	hydrogen and (extraction or separation) and (purify or purification) and palladium and sputter and "95".clas.	US-PGPUB; USPAT	ADJ	ON	2007/06/21 11:19

## EAST Search History

S12	1003	sputter and (palladium or pd) and (membrane or layer or coat) and (salt or solution) and (electroless or electro-less)	US-PGPUB; USPAT	ADJ	ON	2007/06/21 13:30
S13	61	sputter and (palladium or pd) and (membrane or layer or coat) and (salt or solution) and (electroless or electro-less) and "204".clas.	US-PGPUB; USPAT	ADJ	ON	2007/06/21 13:37
S14	10	sputter and (palladium or pd) and (membrane or layer or coat) and (salt near solution) and (electroless or electro-less) and "204".clas.	US-PGPUB; USPAT	ADJ	ON	2007/06/21 14:12
S15	6	sputter and (palladium or pd) and (membrane or layer or coat) and (salt with (electroless or electro-less)) and "204".clas.	US-PGPUB; USPAT	ADJ	ON	2007/06/21 14:12
S16	265	(hydrogen permeable membrane) and (manufacture or fabrication or construction or assembly)	US-PGPUB; USPAT	ADJ	ON	2007/06/22 11:24
S17	18	(hydrogen permeable membrane) with (manufacture or fabrication or construction or assembly)	US-PGPUB; USPAT	ADJ	ON	2007/06/22 11:24
S18	2	10/259874.APP.	US-PGPUB; USPAT	ADJ	ON	2007/06/25 15:39
S19	801	(palladium or pd) with epoxy and (paste or sludge or slime or mixture)	US-PGPUB; USPAT	ADJ	ON	2007/06/26 17:38
S20	35	(palladium or pd) with epoxy and (paste or sludge or slime or mixture) with (niobium or tantalum)	US-PGPUB; USPAT	ADJ	ON	2007/06/26 17:44
S21	4	(palladium or pd) with epoxy with (paste or sludge or slime or mixture) with (niobium or tantalum)	US-PGPUB; USPAT	ADJ	ON	2007/06/25 17:23
S22	38	(paste same (pd or palladium)) and epoxy and electroless and ((pd or pladium) same powder)	US-PGPUB; USPAT	ADJ	ON	2007/06/26 09:36
S23	1	("5243142").PN.	US-PGPUB; USPAT	OR	OFF	2007/06/26 08:56
S24	29	(paste same (pd or palladium)) and epoxy and electroless and ((V or vanadium or Ta or tantalum or niobium or nb) same powder)	US-PGPUB; USPAT	ADJ	ON	2007/06/26 09:37
S25	232133	palladium pd	US-PGPUB; USPAT	OR	ON	2007/06/26 17:45

## EAST Search History

S26	757460	hydrogen "h.sub.2"	US-PGPUB; USPAT	OR	ON	2007/06/26 17:45
S27	2149422	membrane film layer coat	US-PGPUB; USPAT	OR	ON	2007/06/26 17:46
S28	321555	permea\$	US-PGPUB; USPAT	OR	ON	2007/06/26 17:46
S29	416480	palladium niobium tantalum pd nb ta	US-PGPUB; USPAT	OR	ON	2007/06/26 17:47
S30	1349187	paste sludge slime mixture	US-PGPUB; USPAT	OR	ON	2007/06/26 17:47
S31	826938	resin epoxy	US-PGPUB; USPAT	OR	ON	2007/06/26 17:48
S32	9533	S25 near2 S27	US-PGPUB; USPAT	OR	ON	2007/06/26 17:49
S33	4833	S26 near3 S28	US-PGPUB; USPAT	OR	ON	2007/06/26 17:49
S34	1070	(S33 or S29) with S30 with S31	US-PGPUB; USPAT	OR	ON	2007/06/26 17:50
S35	34	S32 and S34	US-PGPUB; USPAT	OR	ON	2007/06/27 13:46
S36	3	((("6572748") or ("6203869") or ("4756848")).PN.	USPAT; USOCR	OR	OFF	2007/06/27 13:28
S37	232133	palladium pd	US-PGPUB; USPAT	OR	ON	2007/06/27 13:47
S38	757460	hydrogen "h.sub.2"	US-PGPUB; USPAT	OR	ON	2007/06/27 13:47
S39	2149422	membrane film layer coat	US-PGPUB; USPAT	OR	ON	2007/06/27 13:47
S40	321555	permea\$	US-PGPUB; USPAT	OR	ON	2007/06/27 13:47
S41	416480	palladium niobium tantalum pd nb ta	US-PGPUB; USPAT	OR	ON	2007/06/27 13:47
S42	1349187	paste sludge slime mixture	US-PGPUB; USPAT	OR	ON	2007/06/27 13:47
S43	826938	resin epoxy	US-PGPUB; USPAT	OR	ON	2007/06/27 13:47
S44	9533	S37 near2 S39	US-PGPUB; USPAT	OR	ON	2007/06/27 13:47
S45	4833	S38 near3 S40	US-PGPUB; USPAT	OR	ON	2007/06/27 13:47
S46	1070	(S45 or S41) with S42 with S43	US-PGPUB; USPAT	OR	ON	2007/06/27 13:47

## EAST Search History

S47	3	S44 and S46 and ("6572748".pn. or "6203869".pn. or "4756848".pn.)	US-PGPUB; USPAT	OR	ON	2007/06/27 13:49
S48	0	(palladium or pd) and (membrane or layer or coat or film) and ".mu. m"	USPAT	OR	OFF	2007/06/27 17:19
S49	64	(palladium or pd) and (membrane or layer or coat or film) and (micrometer or micron) and (DC with sputter)	USPAT	OR	OFF	2007/07/02 17:31
S50	3	(electroless or electro-less) and sputter and (steel with (support or holder or bowl or plate) with porous)	USPAT	OR	OFF	2007/06/27 17:37
S51	0	("20050109609").PN.	USPAT; USOCR	OR	OFF	2007/06/27 17:38
S52	1	("6379524").PN.	USPAT; USOCR	OR	OFF	2007/06/27 17:38
S53	1	("7112287").PN.	USPAT; USOCR	OR	OFF	2007/06/28 16:23
S54	360	kulkarni.in.	USPAT	OR	OFF	2007/06/28 16:51
S55	1	("6283357").PN.	USPAT; USOCR	OR	OFF	2007/06/28 16:51
S56	32	(dc or (direct current)) and sputter and target with "99" and "204".clas.	USPAT	OR	OFF	2007/06/28 16:54
S57	19	(dc or (direct adj current)) and sputter and target with "99" and "204".clas.	USPAT	OR	OFF	2007/06/28 16:54
S58	2	("3350846").PN.	USPAT; USOCR	OR	OFF	2007/06/29 13:23
S59	1	("6379524").PN.	USPAT; USOCR	OR	OFF	2007/06/29 13:52
S60	2	("2773561").PN.	USPAT; USOCR	OR	OFF	2007/06/29 15:20
S61	372	(polish or etch) and (steel with support or holder) and (HCl or hydrochloric acid) and abrasive	US-PGPUB; USPAT	ADJ	ON	2007/07/02 10:08
S62	1	(polish or etch) and (steel with support or holder) and (HCl or hydrochloric acid) and abrasive and (ultra-sonic or ultrasonic) and (hydrogen with (membrane or separation or purif\$))	US-PGPUB; USPAT	ADJ	ON	2007/07/02 10:06

## EAST Search History

S63	117	(polish or etch) and (steel with support or holder) and (HCl or hydrochloric acid) and abrasive and (ultra-sonic or ultrasonic)	US-PGPUB; USPAT	ADJ	ON	2007/07/02 10:08
S64	0	((tetraamine palladium chloride) or (tetraamine palladium dichloride)) and EDTA and (ammonium hydroxide) and hydrazine	US-PGPUB; USPAT	ADJ	ON	2007/07/02 12:09
S65	0	((tetraamine palladium chloride) or (tetraamine palladium dichloride)) and (EDTA or (Edetate disodium)) and (ammonium hydroxide) and hydrazine	US-PGPUB; USPAT	ADJ	ON	2007/07/02 17:32
S66	0	(Pd("NH.sub.3.")".sub.4.Cl.sub.2.") and ("C.sub.10.H.sub.14.N.sub.2.Na.sub.2.O.sub.8.") and ("NH.sub.4.OH") and "NH.sub.2.NH.sub.2.")	US-PGPUB; USPAT	ADJ	ON	2007/07/02 17:31
S67	0	((electroless and electro-less) adj plating) and temperature with ("50" same "70") and ((minute or min) with ("120" same "360"))	US-PGPUB; USPAT	ADJ	ON	2007/07/02 13:06
S68	20	((electroless and electro-less) adj plating) and temperature and (min or minute)	US-PGPUB; USPAT	ADJ	ON	2007/07/02 13:10
S69	15919	(electroless or electro-less) and temperature and (min or minute)	US-PGPUB; USPAT	ADJ	ON	2007/07/02 13:10
S70	10719	((electroless or electro-less) adj plating) and temperature and (min or minute)	US-PGPUB; USPAT	ADJ	ON	2007/07/02 13:11
S71	322	((electroless or electro-less) adj plating) and temperature and (min or minute) and (hydrogen with (membrane or purif\$ or separation))	US-PGPUB; USPAT	ADJ	ON	2007/07/02 14:53
S72	0	((electroless or electro-less) adj plating) and (temperature with ". degree.C") and (min or minute) and (hydrogen with (membrane or purif\$ or separation))	US-PGPUB; USPAT	ADJ	ON	2007/07/02 13:14
S73	19	(dc or (direct current)) with sputter and "204".clas. and ((palladium or pd) with target) and power and temperature and pressure	US-PGPUB; USPAT	ADJ	ON	2007/07/02 16:30

## EAST Search History

S74	735	anneal and (palladium or pd) and temperature and (nitrogen or "n.sub.2.") and (min or minutes or hr or hour) and (hydrogen or "h.sub.2.") and membrane	US-PGPUB; USPAT	ADJ	ON	2007/07/02 17:08
S75	22	anneal and ((palladium or pd) with membrane) and temperature and (nitrogen or "n.sub.2.") and (min or minutes or hr or hour) and (hydrogen or "h.sub.2.")	US-PGPUB; USPAT	ADJ	ON	2007/07/02 16:32
S76	83	anneal and ((palladium or pd) with (silver or Ag)) and (hydrogen same (separation or membrane or purif))	US-PGPUB; USPAT	ADJ	ON	2007/07/02 17:09
S77	0	("AgNO.sub.3.") and ("C.sub.10.H.sub.14.N.sub.2.Na.sub.2.O.sub.8.") and ("NH.sub.4.OH") and "NH.sub.2.NH.sub.2."	US-PGPUB; USPAT	ADJ	ON	2007/07/02 17:32
S78	112	(silver nitrate) and (EDTA or (Edetate disodium)) and (ammonium hydroxide) and hydrazine	US-PGPUB; USPAT	ADJ	ON	2007/07/02 17:53
S79	0	(polish with paper) and (electro polish or electro-polish) and vibration	US-PGPUB; USPAT	ADJ	ON	2007/08/13 11:54
S80	26	(polish with paper) and vibration	US-PGPUB; USPAT	ADJ	ON	2007/08/13 13:31
S81	8	(polish with paper) and vibration and steel	US-PGPUB; USPAT	ADJ	ON	2007/08/13 11:55
S82	27	(polish with paper) and ultrasonic	US-PGPUB; USPAT	ADJ	ON	2007/08/13 13:39
S83	228	preparation and (palladium or pd) and (membrane or layer or coating) and (support or holder) and steel and polish	US-PGPUB; USPAT	ADJ	ON	2007/08/13 13:40
S84	0	preparation and (palladium or pd) and (membrane or layer or coating) and (support or holder) and steel and polish and (ultrasonic or ultra-sonic)	US-PGPUB; USPAT	ADJ	ON	2007/08/13 13:41
S85	33	preparation and (palladium or pd) and (membrane or layer or coating) and (support or holder) and steel and polish and (ultrasonic or ultra-sonic)	US-PGPUB; USPAT	ADJ	ON	2007/08/13 13:41

## EAST Search History

S86	10	preparation and ((palladium or pd) with (membrane or layer or coating)) and (support or holder) and steel and polish and (ultrasonic or ultra-sonic)	US-PGPUB; USPAT	ADJ	ON	2007/08/13 13:43
S87	62698	((support or holder or pedestal or platform) with steel)	US-PGPUB; USPAT	ADJ	ON	2007/08/13 13:43
S88	1816	((support or holder or pedestal or platform) with steel) and (polish or etch or reverse sputter)	US-PGPUB; USPAT	ADJ	ON	2007/08/13 13:44
S89	490	((support or holder or pedestal or platform) with steel) and (polish or etch or reverse sputter) and paper	US-PGPUB; USPAT	ADJ	ON	2007/08/13 13:44
S90	106	((support or holder or pedestal or platform) with steel) and (polish or etch or reverse sputter) and paper and (ultrasonic or ultra-sonic)	US-PGPUB; USPAT	ADJ	ON	2007/08/13 13:58
S91	31	((support or holder or pedestal or platform) with steel) and (polish or etch or reverse sputter) and paper and (ultrasonic or ultra-sonic) and electro	US-PGPUB; USPAT	ADJ	ON	2007/08/13 13:45
S92	3	((("5681217") or ("4055686") or ("20050102809")).PN.	US-PGPUB; USPAT	OR	OFF	2007/08/13 13:59
S93	3	((("4496373") or ("4536196") or ("4313013")).PN.	US-PGPUB; USPAT	OR	OFF	2007/08/13 20:20
S94	212	585/818.ccls.	US-PGPUB; USPAT	ADJ	ON	2007/08/13 20:21
S95	16	585/818.ccls. and (anneal or heat) and (hour or min) and hydrogen and nitrogen	US-PGPUB; USPAT	ADJ	ON	2007/08/13 20:21
S96	1	("20030024807").PN.	US-PGPUB; USPAT	OR	OFF	2007/08/13 20:45
S97	50	(DC with sputter) and (watt or W) and (vacuum pressure) and temperature	US-PGPUB; USPAT	ADJ	ON	2007/08/13 21:50
S98	22	(DC with sputter) and (watt or W) and (vacuum pressure) and temperature and (palladium or pd)	US-PGPUB; USPAT	ADJ	ON	2007/08/13 21:50